

**IN THE CLAIMS:**

Claims 1 - 8 (canceled)

9. (Original) A method of producing a silicon ingot, characterized in that the silicon ingot is pulled by the CZ method under conditions satisfying the following (1) and (2):

$$(1) \ 1.15 \leq (G1_{edge}/G1_{center}) \leq 1.25$$

$$(2) \ 0.5 < (\text{OSF ring inner diameter/crystal diameter}) < 1.06 \times (G1_{center} \times G2_{center})^{-0.2}$$

Claims 10 - 15 (canceled)

16. (New) A method of producing while reducing crystal defects a silicon ingot, comprising the step of pulling the silicon ingot by the CZ method so that:

$$(1) \ 1.15 \leq (G1_{edge}/G1_{center}) \leq 1.25$$

$$(2) \ 0.5 < (\text{OSF ring inner diameter/crystal diameter}) < 1.06 \times (G1_{center} \times G2_{center})^{-0.2}$$

where

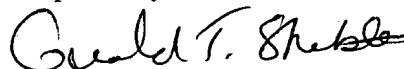
$G1_{edge}$  is that temperature gradient ( $^{\circ}\text{C}/\text{mm}$ ) in the axis at the crystal edge in the temperature region from the solid-liquid interface temperature to approximately  $1350^{\circ}\text{C}$ ;

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$G_1$  center is the axial direction temperature gradient ( $^{\circ}\text{C}/\text{mm}$ ) at the crystal center from the solid liquid interface temperature to approximately  $1350^{\circ}\text{C}$ ; and

$G_2$  Center is the axial direction temperature gradient ( $^{\circ}\text{C}/\text{mm}$ ) at the center of the crystal new  $1120^{\circ}\text{C}$ .

Respectfully submitted,



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